**Index of Claims** 

| Applic | ation | Con | trol | No. |
|--------|-------|-----|------|-----|
|        |       |     |      |     |

10/017,585

Examiner

David L. Lewis

Applicant(s)/Patent under Reexamination

CHOI ET AL.

Art Unit

2629

| <b>√</b> | Rejected |
|----------|----------|
| II       | Allowed  |

| - | (Through numeral)<br>Cancelled |
|---|--------------------------------|
| + | Restricted                     |

| Z | Non-Elected  |
|---|--------------|
| ı | Interference |

| A | Appeal   |
|---|----------|
| 0 | Objected |

| Cla  | im       | Γ        |                 |   |          | Date     | е  |          |                 |          |          | Clair   | n        |          |                   |          |          | Date   | ;        |          |  |          | [   | Cla   | aim        |                   |          |          | C        | Date            | }        |          |          |   |
|--|----------|----------|-----------------|---|----------|----------|--|----------|-----------------|----------|----------|---|----------|----------|-------------------|----------|----------|--|----------|----------|--|----------|-----|-------|------------|-------------------|----------|----------|----------|-----------------|----------|----------|----------|---|
|  | 166      | _        |                 |   |          |          |  |          | П               |          |          |   | 듣        |          |                   |          |          |  |          |          | T  | 7        | ſ   |       | al         |                   |          |          |          |                 |          |          |          |   |
| Final  | Original | 6/24/06  |                 |   |          |          |  |          |                 |          | Final    | !   | Original | ı        |                   |          |          |  |          | ١        |  | -        | - 1 | Final | Original   |                   |          |          |          |                 |          |          | -        | ı |
| 证  | Ĕ        | 2        |                 |   |          |          |  |          |                 |          | 🛅        | :   | 泛.       |          |                   |          |          |  | - 1      | - 1      | - 1  | -1       | - 1 | 這     | ğ          | - 1               |          |          |          | ıl              |          |          |          | ı |
|  | )        |          |                 |   |          |          |  |          |                 |          |          |   |          |          |                   |          |          |  |          |          |  | ╝        | L   |       |            |                   |          |          |          | Ш               |          |          |          |   |
|  | 1        | √        |                 |   |          |          |  |          |                 |          |          |   | 51       |          |                   |          |          |  |          | $\Box$   | $\perp$  |          |     |       | 101        |                   |          |          |          | Ш               |          |          |          |   |
|  | 2        | <b>\</b> |                 |   |          |          |  |          |                 |          |          |   | 52       |          |                   |          |          |  |          |          |  | ╝        |     |       | 102        |                   |          |          |          | Ш               |          |          |          |   |
|  | 3        | ✓        |                 |   |          |          |  |          | Ш               |          |          |   | 53       |          | ᆜ                 | ┙        |          |  |          |          | $\perp$  | ╝        | L   |       | 103        |                   |          |          |          | Ш               |          |          |          |   |
|  | 4        | ✓        |                 |   |          |          |  |          |                 | _        |          |   | 54_      |          |                   | ᅵ        |          |  | $\Box$   | $\perp$  | $\perp$  | ┙        | L   |       | 104        | _                 |          |          |          | Ш               |          |          | _        | _ |
|  | 5        | V        |                 |   |          |          | _  |          |                 |          |          |   | 55       |          |                   | _        | _        | $\Box$   | _        | _        |  | ┙        | Ļ   |       | 105        | _                 |          |          |          |                 |          | _        | _        | _ |
|  | 6        | ✓        |                 |   | Щ        |          |  |          | Ш               |          |          | _   | 56       | _        | _                 | _        | _        |  | _        | 4        | 4  | 4        | Ļ   |       | 106        | _                 | _        |          |          | Ш               |          | _        | _        |   |
| ldash  | 7        | ✓        |                 |   | _        |          |  | L.       | $\sqcup$        | _        | <u> </u> |   | 57       | _        | _                 | _        | _        | $\dashv$   | 4        | _        | _  | 4        | Ļ   |       | 107        | _                 | 4        | _        |          | Ш               |          | _        | _        |   |
|  | 8        | ✓        | Ш               |   | Ш        |          |  | Ш        |                 | _        | <u> </u> |   | 58       | _        | _                 | _        | _        |  | _        | _        |  | 4        | Ļ   |       | 108        | _                 | 4        |          |          | Ш               |          | _        | _        |   |
|  | 9        | <b>√</b> | Ш               |   | Ш        |          |  | Ш        | Ш               | $\dashv$ | <u> </u> |   | 59       | _        | 4                 | _        |          | Ш  | _        | _        |  | 4        | ŀ   |       | 109        | _                 | _        |          |          | Ш               |          | _        | _        | _ |
| $\sqcup$   | 10       | Ý        | $\sqcup$        | _ | Н        |          | _  | Щ        | $\vdash \vdash$ | 4        | $\vdash$ | +   | 60       |          | _                 | _        | _        | $\vdash \vdash$                                  | _        | $\dashv$ | +  | 4        | -   |       | 110        | _                 | 4        | _        |          | $\vdash$        |          | -        | $\dashv$ |   |
|  | 11       | <b>√</b> | $\sqcup$        |   | Ш        | _        | _  | Щ        |                 | _        | $\vdash$ |   | 61       | _        | _                 |          | _        | $\vdash$   | _        | -        | +  | 4        | ŀ   |       | 111        | _                 | _        | _        |          | Ш               |          | _        | _        |   |
| <u> </u>   | 12       | Ź        | $\vdash \vdash$ | _ | Н        | -        | $\vdash$   | Н        | $\vdash \vdash$ | $\dashv$ | $\vdash$ |   | 62       | _        |                   | _        | _        | $\vdash \vdash$                                  | -        | -        | $\dashv$   | $\dashv$ | -   |       | 112        | _                 | _        | _        | $\Box$   | Щ               | _        | $\dashv$ |          | _ |
|  | 13       | <b>√</b> | $\vdash \vdash$ |   | Н        | ш        | $\vdash$   | $\vdash$ | $\vdash \vdash$ | $\dashv$ | -        | +   | 63       |          |                   |          |          | $\vdash \vdash$                                  | -        |          | +  | $\dashv$ | -   |       | 113        |                   |          |          | -        | $\vdash$        |          |          | $\dashv$ | _ |
| $\vdash$   | 14       | <b>√</b> | $\vdash \vdash$ | _ | Н        | $\vdash$ |  | $\vdash$ | $\vdash \vdash$ | $\dashv$ | <u> </u> |   | 64<br>65 |          | -                 | -        | $\dashv$ | $\vdash \vdash$                                  | -        | -        | $\dashv$   | $\dashv$ | -   |       | 114        |                   |          | _        | $\vdash$ | $\vdash$        | $\vdash$ | $\dashv$ | $\dashv$ | _ |
|  | 15<br>16 | <b>√</b> | $\vdash \vdash$ |   | $\vdash$ | H        | -  | $\vdash$ | $\vdash \vdash$ | $\dashv$ | $\vdash$ |   | 65<br>66 | $\dashv$ | -                 | $\dashv$ |          | $\vdash \vdash$                                  | -        | $\dashv$ | $\dashv$   | $\dashv$ | }   |       | 115<br>116 |                   | -        | _        |          | Н               | $\vdash$ | $\dashv$ | $\dashv$ | _ |
| $\vdash$   |          | 1        | $\vdash \vdash$ |   | Н        | Н        | $\vdash$   | Н        | Н               | $\dashv$ |          |   |          |          |                   | -        | -        | $\vdash$   | -        | $\dashv$ | $\dashv$   | -        | }   |       | 117        | $\dashv$          | $\dashv$ | -        | -        | $\vdash \vdash$ | $\vdash$ | $\dashv$ | $\dashv$ | _ |
| $\vdash$   | 17<br>18 | √,       | $\vdash \vdash$ | _ | Н        | H        |  | Н        | $\vdash \vdash$ | $\dashv$ | $\vdash$ |   | 67<br>68 | $\dashv$ | $\dashv$          | $\dashv$ |          | $\vdash$   |          | -        | +  | $\dashv$ | ŀ   |       |            | $\dashv$          |          |          |          | $\vdash \vdash$ | $\vdash$ | $\dashv$ | $\dashv$ |   |
|  | 18       | <b>√</b> | $\vdash \vdash$ |   | Н        | Н        | $\vdash$   | Н        | $\vdash$        | $\dashv$ | -        |   | 68<br>69 |          |                   | $\dashv$ |          | $\vdash$   | -        | $\dashv$ | +  | $\dashv$ | -   |       | 118<br>119 | -                 | -        | _        | $\dashv$ | $\vdash \vdash$ | $\vdash$ | $\dashv$ | $\dashv$ |   |
|  | 20       | <b>√</b> | $\vdash$        |   | $\vdash$ | -        | <del>                                     </del> | Н        | $\vdash$        | $\dashv$ | $\vdash$ |   | 70       | -        | $\dashv$          | $\dashv$ | $\dashv$ | $\vdash$   | $\dashv$ | $\dashv$ | +  | $\dashv$ | ŀ   |       | 120        |                   |          |          |          | $\vdash \vdash$ | $\vdash$ | $\dashv$ | $\dashv$ |   |
|  | 21       | <b>√</b> | $\vdash\vdash$  | _ | Н        | $\vdash$ | $\vdash$   | Н        | $\vdash$        | $\dashv$ | $\vdash$ |   | 70<br>71 | $\dashv$ |                   | -        |          | $\vdash \vdash$                                  |          | $\dashv$ | +  | $\dashv$ | ŀ   |       | 121        |                   | $\dashv$ |          |          | $\vdash$        |          | -        | $\dashv$ | _ |
| $\vdash$   | 22       | ⊬        | $\vdash\vdash$  |   | $\vdash$ | $\vdash$ | -  | Н        | $\vdash$        | $\dashv$ | -        |   | 71<br>72 |          | $\dashv$          |          | $\dashv$ | <del>                                     </del> | -+       | -+       | +  | $\dashv$ | ŀ   |       | 122        |                   | $\dashv$ | $\dashv$ | $\vdash$ | $\vdash$        |          | $\dashv$ | $\dashv$ | _ |
| <del>                                     </del> | 23       | $\vdash$ | $\vdash \vdash$ | - | Н        |          | $\vdash$   | Н        | $\vdash$        | $\dashv$ | $\vdash$ |   | 73       | $\dashv$ |                   | $\dashv$ | ᅱ        | $\vdash$   | -        | $\dashv$ | -  | $\dashv$ | ŀ   |       | 123        | $\dashv$          | $\dashv$ | ᅥ        |          | $\vdash$        | -        | $\dashv$ | $\dashv$ | _ |
| <del>                                     </del> | 24       | $\vdash$ | $\vdash$        |   | Н        |          | H  | H        | $\vdash$        | $\dashv$ | $\vdash$ | +   | 74       | $\dashv$ |                   |          | $\dashv$ | $\vdash$   |          | $\dashv$ | +  | $\dashv$ | ŀ   |       | 124        | -                 | $\dashv$ |          |          | $\vdash$        | $\vdash$ |          | $\dashv$ |   |
|  | 25       | _        |                 | _ | Н        |          |  | Н        | H               | $\dashv$ |          |   | 75       |          | ┈┤                | $\dashv$ |          | -  | $\dashv$ | $\dashv$ | +  | $\dashv$ | ŀ   |       | 125        | -1                |          | _        | $\dashv$ | $\vdash$        |          | $\dashv$ | $\dashv$ | _ |
| -  | 26       |          |                 |   | Н        |          |  | Н        | $\vdash$        | _        | $\vdash$ |   | 76       | $\dashv$ | $\dashv$          | $\dashv$ | $\dashv$ | $\vdash$   | $\dashv$ | -        | $\dashv$   | ┨        | ŀ   |       | 126        | -                 |          |          | -        | $\vdash$        | _        | -        | $\dashv$ |   |
|  | 27       |          | $\vdash$        |   | Н        | -        | -  | Н        | $\vdash$        | $\dashv$ |          |   | 77       | $\dashv$ | ᅱ                 | $\dashv$ | $\dashv$ | $\dashv$   | -        | -        | +  | ┨        | ŀ   |       | 127        | $\dashv$          | -        | -        | -        | $\vdash$        | _        | -        | $\dashv$ | _ |
|  | 28       | $\vdash$ | $\dashv$        |   | $\vdash$ | _        | $\vdash$   |          |                 |          | $\vdash$ |   | 78       | $\neg$   | $\dashv$          | -        |          |  | 一        | 7        | $\dashv$   | ┪        | ŀ   |       | 128        | -                 |          | _        |          | $\vdash$        |          | $\dashv$ | -        |   |
|  | 29       | _        | $\dashv$        |   | Н        | _        | Н  | Н        | Н               |          |          | +   | 79       |          | 一                 | 一        | 一        | $\dashv$   | _        | _        | +  | ᅱ        | ŀ   |       | 129        | $\dashv$          |          | _        |          | Н               | -        | $\neg$   | $\dashv$ |   |
|  | 30       |          |                 | _ | М        |          |  | Н        | Н               |          |          |   | 80       | _        | _                 | 一        | _        | $\neg$   | $\dashv$ | 寸        | $\top$   | ヿ        | ı   |       | 130        | $\dashv$          | $\dashv$ |          |          | П               |          | $\dashv$ | $\dashv$ | _ |
|  | 31       |          | H               |   |          |          |  | П        | $\Box$          |          |          |   | 81       |          | 一                 | $\neg$   | $\neg$   | $\neg$   | $\neg$   | 寸        | $\top$   | ┨.       | ı   |       | 131        | $\neg$            |          | $\neg$   | $\neg$   | П               |          | $\neg$   | $\dashv$ | _ |
|  | 32       |          | $\Box$          |   | П        |          | П  | П        |                 | $\neg$   |          |   | 82       |          | 一                 | $\dashv$ |          |  | 7        | $\dashv$ | 十  | ٦        | f   |       | 132        | 一                 | $\neg$   | $\neg$   |          | $\Box$          | $\dashv$ | _        | $\dashv$ | _ |
|  | 33       |          | П               |   |          |          | П  | П        | П               | $\neg$   |          |   | 83       |          | ヿ                 | $\dashv$ |          | $\neg$   |          |          | $\top$   | 7        | ı   |       | 133        | $\neg$            |          | $\neg$   |          | $\sqcap$        |          |          | $\dashv$ |   |
|  | 34       |          |                 |   |          |          |  | П        | П               | $\neg$   |          |   | 84       |          | 一                 |          |          |  |          | $\neg$   | $\top$   | 7        | ı   |       | 134        | $\dashv$          |          |          |          | $\sqcap$        |          | $\dashv$ | $\dashv$ |   |
|  | 35       |          |                 |   |          |          |  |          |                 |          |          |   | 85       | _ 1      |                   | _        | _        |  |          |          |  | 1        | -   |       | 135        | 一                 |          |          |          | $\Box$          |          |          | $\Box$   | _ |
|  | 36       |          |                 |   |          |          |  |          |                 |          |          |   | 86       |          |                   |          |          |  |          |          |  | 7        |     |       | 136        | 一                 | $\neg$   |          |          | $\sqcap$        |          | $\dashv$ | $\dashv$ |   |
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|  | 38       |          |                 |   |          |          |  |          |                 |          |          |   | 88       |          | ┚                 |          |          |  |          |          |  |          |     |       | 138        |                   |          |          |          |                 |          |          |          |   |
|  | 39       |          |                 |   |          |          |  |          |                 |          |          |   | 89       |          |                   |          |          |  |          |          |  |          |     |       | 139        |                   |          |          |          |                 |          |          | $\Box$   |   |
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|  | 41       |          |                 |   |          |          |  |          |                 |          |          |   | 91       |          |                   | $\Box$   |          |  |          |          |  |          |     |       | 141        |                   |          |          |          |                 |          |          |          |   |
|  | 42       |          |                 |   | Ш        |          |  |          | Ш               | _]       |          | $oldsymbol{oldsymbol{oldsymbol{oldsymbol{\Box}}}$ | 92       |          |                   | $\Box$   |          |  | $\Box$   |          | $\perp \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \! \!$ |          |     |       | 142        |                   | $\Box$   |          |          |                 |          | $\Box$   |          | _ |
|  | 43       | Ш        | Ш               |   |          |          |  | Ш        | Ц               | _        |          |   | 93       |          | [                 | $\perp$  | ]        |  |          | _        | $\perp$  | ┙        |     |       | 143        |                   | [        |          |          | Ш               |          |          |          |   |
| $oxed{oxed}$                                     | 44       | Ш        | Щ               |   | Ш        | Ш        | $\Box$   | Ш        | Ц               |          | $\vdash$ |   | 94       |          | $\perp$           | _        | _]       | Ш  | [        | $\perp$  |  | ╛        |     |       | 144        | $\perp$           | _[       |          |          | Ш               |          |          | [        |   |
|  | 45_      | Ш        | Ш               |   | Ш        |          | Щ  | Ш        | Ш               | _        | $\vdash$ |   | 95       |          | [                 | _        | $\Box$   | $\Box$   | _[       | $\perp$  | $\perp$  | _        |     |       | 145        | [                 | [        |          |          | Ш               |          |          |          | _ |
|  | 46       |          | Ш               |   | Ш        | Ш        | Ш  | Ш        | Ш               | _        | $\perp$  |   | 96       |          |                   | _        | _        |  |          | $\perp$  | $\perp$  | _        |     |       | 146        | $\perp$           | _[       |          |          | Ш               |          |          |          |   |
| <u> </u>   | 47       |          | Ш               |   | Ш        | Ш        | Ш  | Ш        | Ш               | $\Box$   | L.       |   | 97       | ]        | $oldsymbol{\bot}$ | $\perp$  | _        |  |          | $\perp$  | $\perp$  | $\perp$  |     |       | 147        | I                 |          |          |          | Ш               |          | $\Box$   |          |   |
| $\square$  | 48       |          |                 |   | Ш        |          |  | Ш        | Ц               | $\Box$   | <u> </u> |   | 98       | _        | $\perp$           | $\dashv$ |          | $\dashv$   |          | _        | _  | _        | L   |       | 148        |                   | [        |          | _]       | Ш               |          | [        | [        |   |
|  | 49       | Ш        | Щ               |   | Ш        |          |  | Ш        | Ш               | $\Box$   | $\vdash$ |   | 99       |          | _                 | _        |          | $\dashv$   | _        | _        | _ _  | _        | 1   |       | 149        | $oldsymbol{\bot}$ | _        | _]       |          | Ш               |          | [        | [        |   |
|  | 50       |          |                 |   |          |          | L  | Ш        |                 |          |          |   | 00       |          |                   |          |          | ot   |          |          | $\perp$  |          | L   |       | 150        |                   |          |          |          | ┙               |          |          | 丄        |   |